DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 3-4, 6-11, 13, 15, 17-19, 21-25, 27 and 29 are allowed.

2. The following is a statement of reasons for the indication of allowable subject matter: The art of record does not suggest the respective claim combinations together and the respective claim combinations are not obvious:

As per independent claim 1: A control system having a central digital controller having a digital controller frame rate and a command signal, a motor, and a motor controller in communication with the central digital controller and the motor, the motor controller having a motor controller frame rate higher than the digital controller frame rate, the control system comprising: a signal conditioner adapted to condition the command signal so as to generate a modified command signal at the motor controller frame rate.

The apparatus distinguishes over prior art references especially for the following points:

The modified command signal is formed from one of: the signal conditioner performing an interpolation of the command signal over a plurality of frames, and calculating a moving average at the frame rate of the motor controller; and the signal conditional performing a first order hold, and filtering the first order hold.

As per independent claims 11, 15 and 25: It is the same reason as claim 1.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,701,284 to Lee discloses a disk rotation control apparatus and method.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Luo whose telephone number is (571)270-5251. The examiner can normally be reached on M-F 9AM-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on (571)272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D.L./
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Art Unit 2837

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